

Electronic Expansion Valves

Elektronik Genleşme Valfleri



Introduction

TS/S series electronic expansion valves are designed for use in air conditioning and refrigeration systems or in heat pumps. The valve controls the automatic adjustment of refrigerant flow rate and makes the system work under optimized conditions for the purpose of fast cooling or heating, precise temperature control and energy saving. The valve can also be used e.g. for suction line pressure controls. These valves provide bidirectional operation to control the refrigerant flow rate in heating or cooling mode.

Genel Tanım

TS/S serisi elektronik genleşme vanaları, klima ve soğutma sistemlerinde veya ısı pompalarında kullanılmak üzere tasarlanmıştır. Vana, soğutucu akış hızının otomatik ayarını kontrol eder ve sistemini hızlı soğutma veya ısıtma, hassas sıcaklık kontrolü ve enerji tasarrufu amacıyla optimize edilmiş koşullarda çalışmasını sağlar. Vana ayrıca emiş hattı basınç kontrolü gibi uygulamalar için de kullanılabilir. Bu vanalar, ısıtma veya soğutma modunda soğutucu akış hızını kontrol etmek için çift yönlü işlem sağlar.

Order No	Model	Description	Seat (mm)	Kv (m3/h)	MOPD Direct ³ [Bar]	MODP Rev. ⁴ [Bar]	Pack [qty]	DPF 49 Bar
10130391602	DPF(TS1)1.0C-15	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4"	1,0	0,03	35	≥25	50	
10130389302	DPF(TS1)1.3C-21	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	1,3	0,05	35	≥25	50	
10130391702	DPF(TS1)1.65C-36	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	1,65	0,08	35	≥25	50	
10130391802	DPF(TS1)1.8C-69	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	1,8	0,1	35	≥25	50	
10130392402	DPF(TS1)2.0C-33	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	2	0,16	35	≥25	50	
10130392702	DPF(TS1)2.2C-24	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	2,2	0,2	35	≥25	50	
10130392602	DPF(TS1)2.4C-40	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	2,4	0,23	35	≥25	50	
10130390002	DPF(TS1)1.0C-16	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	1.0	0,03	35	≥25		
10130392002	DPF(TS1)1.3C-22	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	1,3	0,05	35	≥25		
10130395102	DPF(TS1)1.65C-38	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	1,65	0,08	35	≥25		
10130390402	DPF(TS1)1.8C-68	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	1,8	0,1	35	≥25		
10130392602	DPF(TS1)2.0C-40	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	2,4	0,23	35	≥25		
10130425202	DPF(TS1)2.2C-38	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	2,2	0,2	35	≥25		
10130404802	DPF(TS1)2.4C-41	Electronic Expansion Valve (DPF) TS1 Series ODF 1/4	2,4	0,23	35	≥15		
10130389902	DPF(TS1)3.0C-29	Electronic Expansion Valve (DPF) TS1 Series ODF 5/16	3	0,39	35	≥15	50	
10130389502	DPF(TS1)3.2C-30	Electronic Expansion Valve (DPF) TS1 Series ODF 5/16	3,2	0,43	35	≥15	50	
10130355702	DPF(S03)4.0C-01	Electronic Expansion Valve (DPF) TS1 Series ODF 5/8	4	0,5	35	≥7		
10130035502	DPF(S03)4.5C-01	Electronic Expansion Valve (DPF) TS1 Series ODF 5/8	4,5	0,7	35	≥7		
10130355802	DPF(S03)5.5C-01	Electronic Expansion Valve (DPF) TS1 Series ODF 5/8	5,5	0,9	35	≥7		
10130355902	DPF(S03)6.5C-02	Electronic Expansion Valve (DPF) TS1 Series ODF 5/8	6,5	1,1	30	≥7		
Order No	Model	Description	Cable Length (mm)	Valve Model	Weight [kg]	Pack [qty]	COILS BOBINLER	
10810138802	PQ-M10012-001059	Coil for EEV - DPF(TS1) Series	700 mm	DPF 1.0~3.2	0.12		PQ 12V : 4-phase 8-step	
10810134602	PQ-M10012-001016	Coil for EEV - DPF(TS1) Series	1500 mm					
10810130702	PQ-M10012-001002	Coil for EEV - DPF(TS1) Series	2000 mm					
10810160602	PQ-M10012-001268	Coil for EEV - DPF(TS1) Series	5000 mm			0.3		
10810171302	PQ-M03012-001004	Coil for EEV - DPF(S03) Series	2000 mm	DPF 4.0~6.5	0.6	24		
10810141302	PQ-M03012-001041	Coil for EEV - DPF(S03) Series	5000 mm		0.5	24		

Technical Specifications

- Applicable for all common HFC, HFO refrigerants
- Cooling capacity: 2 to 121 kW (for R410A)
- Medium temperature TS min./max.: -40°C / +85°C (duty cycle rate below 50%)
- Ambient temperature min./max.: -30°C / +60°C (duty cycle rate below 50%)

Teknik Özellikler

- Tüm yaygın HFC, HFO soğutucuları için uygundur
- Soğutma kapasitesi: 2 ila 121 kW (R410A için)
- Ortam sıcaklığı TS min./maks.: -40°C / +85°C (görev döngüsü oranı %50'nin altında)
- Çevresel sıcaklık min./maks.: -30°C / +60°C (görev döngüsü oranı %50'nin altında)

Order No

Model

Description

Dimensions

Inlet

Outlet

Weight [kg]

Pack [qty]

10136007902

LPF03-001

Electronic Expansion Valve (LPF)

3/8

1/2

51,8

36

10136008102

LPF05-001

Electronic Expansion Valve (LPF)

3/8

1/2

51,8

36

10136003202

LPF08-001

Electronic Expansion Valve (LPF)

3/8

1/2

51,8

10136003302

LPF08-002

Electronic Expansion Valve (LPF)

1/4

1/4

44.2

10136000502

LPF10-002

Electronic Expansion Valve (LPF)

3/8

1/2

51.8

10136000602

LPF10-003

Electronic Expansion Valve (LPF)

1/4

3/8

47.7

10136000902

LPF14-002

Electronic Expansion Valve (LPF)

3/8

1/2

51.8

10136001002

LPF14-003

Electronic Expansion Valve (LPF)

1/4

3/8

47.7

10136001302

LPF18-002

Electronic Expansion Valve (LPF)

3/8

1/2

51.8

10136001502

LPF24-002

Electronic Expansion Valve (LPF)

3/8

1/2

51.7

10136003902

LPF30-001

Electronic Expansion Valve (LPF)

3/8

1/2

52.6

10136003402

LPF32-001

Electronic Expansion Valve (LPF)

3/8

1/2

52.6

10136004002

LPF32-002

Electronic Expansion Valve (LPF)

1/4

3/8

48.4

10136004502

LPF32-003

Electronic Expansion Valve (LPF)

1/4

3/8

51.7

LPF 49 Bar



Order No

Model

Description

Coil Dim. [mm]

Weight [kg]

10810127602

PQ-M24012-000007

Coil for LPF/LPF-D Series

1500

140,2

10810129502

PQ-M24012-000008

Coil for LPF/LPF-D Series

3000

140,2

10810129602

PQ-M24012-000009

Coil for LPF/LPF-D Series

6000

140,2

10810129702

PQ-M24012-000010

Coil for LPF/LPF-D Series

9000

140,2

COILS BOBİNLER PQ





Introduction

VPF series electronic expansion valves are designed for commercial and industrial applications. The valve controls the automatic adjustment of refrigerant flow rate and makes the system work under optimized conditions for the purpose of fast cooling or heating, precise temperature control and energy saving.

Genel Tanım

VPF serisi elektronik genleşme vanaları, ticari ve endüstriyel uygulamalar için tasarlanmıştır. Vana, soğutucu akış hızının otomatik ayarını kontrol eder ve sistemini hızlı soğutma veya ısıtma, hassas sıcaklık kontrolü ve enerji tasarrufu amacıyla optimize edilmiş koşullar altında çalıştırır.

Order No	Model	Valve Shape	Sight Glass	Connections ø D F Inlet A x Outlet B		Seat ø [mm]	Kv ²) [m³/h]	MWP [bar]	Pack [qty]	VPF
				[inch]	[mm]					
10130349802	VPF12.5H59	L-shape	without	7/8 x 7/8	22 x 22	7,5	0,8	50		
10130356202	VPF25H53	straight	without	7/8 x 7/8	22 x 22	7,5	1,4	50		
10130344802	VPF50H03	straight	with	1 1/8 x 1 1/8	-	14,4	2,3	50		
10130356602	VPF100H03	straight	with	1 3/8 x 1 3/8	35 x 35	14,4	4,0	50		
10130356702	VPF150H02	L-shape	with	1 5/8 x 1 5/8	-	14,8	7,7	50		
10130356402	VPF250H03	straight	with	1 5/8 x 1 5/8	-	25	11,9	45		
10130343302	VPF400H01	straight	with	2 1/8 x 2 1/8	54 x 54	33	17,0	45		



Four Way Reversing Valves

Dört Yollu Vanalar

Introduction

SHF series four-way reversing valves are applicable for heat pump systems such as central, unitary and room air conditioners to realize switching between cooling mode and heating mode by changing the flow path of refrigerant.

Genel Tanım

SHF serisi dört yollu vanalar, merkezi, tekli ve oda klima sistemleri gibi ısı pompası sistemlerinde uygundur. Bu vanalar, soğutucunun akış yolunu değiştirerek soğutma modu ile ısıtma modu arasında geçiş yapmayı gerçekleştirmek için kullanılır.

Order No	Model	Description	Connections ODF		Kv	Length [mm]	Pack [qty]	SHF
			ØD [inch]	ØE/S/C [inch]				
10180953202	SHF(L)-3H-12U-52	4 Way Reversing Valve (SHF) Tube D 1/4"	1/4"	5/16"	1,5	88,2		
10180952502	SHF(L)-4H-23U-52	4 Way Reversing Valve (SHF) Tube D 5/16"	5/16"	3/8"	1,6	94,4		
10180952602	SHF(L)-7H-34U-52	4 Way Reversing Valve (SHF) Tube D 3/8"	3/8"	1/2"	2,9	113	48	
10180952402	SHF(L)-11H-35U-52	4 Way Reversing Valve (SHF) Tube D 3/8"	3/8"	5/8"	4,5	115,5	48	
10180950102	SHF(L)-11H-45D1-52	4 Way Reversing Valve (SHF) Tube D 1/2"	1/2"	5/8"	4,5	117	36	
10325051402	SHF-14A-46	4 Way Reversing Valve (SHF) Tube D 1/2"	1/2"	3/4"	6,6	163	18	
10325055702	SHF-20D-47-02	4 Way Reversing Valve (SHF) Tube D 1/2"	1/2"	7/8"	9,9	183,6	18	
10325039802	SHF-20D-67-02	4 Way Reversing Valve (SHF) Tube D 3/4"	3/4"	7/8"	9,9	183,6	18	
10325031002	SHF-35B-67-04	4 Way Reversing Valve (SHF) Tube D 3/4"	3/4"	7/8"	14,7	212,2	12	
10325058501	SHF-35B-69-04	4 Way Reversing Valve (SHF) Tube D 3/4"	3/4"	1 1/8"	14,7	212,2	12	
10325059102	SHF-35B-59-04	4 Way Reversing Valve (SHF) Tube D 5/8"	5/8"	1 1/8"	14,7	212,2	12	
10325059002	SHF-35B-57-04	4 Way Reversing Valve (SHF) Tube D 5/8"	5/8"	7/8"	14,7	212,2	12	
10325058302	SHF-35B-79-04	4 Way Reversing Valve (SHF) Tube D 7/8"	7/8"	1 1/8"	14,7	212,2	12	
10325059702	SHF-50A-79	4 Way Reversing Valve (SHF) Tube D 7/8"	7/8"	1 1/8"	18,3	217	12	
10325030202	SHF(L)-70-810-20	4 Way Reversing Valve (SHF) Tube D 1"	1"	1 1/4"	28,5	303	1	
10325048902	SHF(L)-70-911-21	4 Way Reversing Valve (SHF) Tube D 1 1/8"	1 1/8"	1 3/8"	28,5	321	1	
10325049302	SHF(L)-70-913-25	4 Way Reversing Valve (SHF) Tube D 1 1/8"	1 1/8"	1 5/8"	28,5	321	1	
10325037902	SHF(L)-100-911	4 Way Reversing Valve (SHF) Tube D 1 1/8"	1 1/8"	1 3/8"	40,5	321		
10325034702	SHF(L)-100-913-01	4 Way Reversing Valve (SHF) Tube D 1 1/8"	1 1/8"	1 5/8"	40,5	303		
10180940402	SHF(L)-140-1214	4 Way Reversing Valve (SHF) Tube D 1 1/2"	1 1/2"	1 3/4"	58,4	390		
10325030402	SHF(L)-175-1217	4 Way Reversing Valve (SHF) Tube D 1 1/2"	1 1/2"	2 1/8"	70,5	390		
10325034002	SHF(L)-175-1317	4 Way Reversing Valve (SHF) Tube D 1 5/8"	1 5/8"	2 1/8"	70,5	390		
10325030502	SHF(L)-210-1321	4 Way Reversing Valve (SHF) Tube D 1 5/8"	1 5/8"	2 5/8"	84,4	452		



Technical Specifications

- Applicable for all common HCFC, HFC, HFO, HC
- Medium temperature TS min./max.: -30°C / +135°C
- Ambient temperature min./max.: -30°C / +50°C
- Relative humidity: 0 to 95% RH
- Max. operating pressure PS: 45 bar

Teknik Özellikler

- Tüm yaygın HCFC, HFC, HFO, HC'ler için uygundur
- Ortam sıcaklığı TS min./maks.: -30°C / +135°C
- Çevresel sıcaklık min./maks.: -30°C / +50°C
- Bağıl nem: 0 ila 95% RH
- Maks. işletme basıncı PS: 45 bar

Order No	Model	Description	Electrical Function/ Connection Type	Cable Length [mm]	Power Supply [-]	Power Consumption			Pack [qty]	Coil Bobini SQ
						AC 50Hz [W]	AC 60Hz [W]	DC [W]		
10805231802	SQ-D44012-000001	Coil For SHF, SQ-D44, DC 12V IP54	Spade (Faston)³	-	DC	-	-	10	39	
10805069302	SQ-D27012-000001	Coil For SHF, SQ-D27, DC 12V	Bi-stable Lead W	500	DC	-	-	20	39	
10805263302	SQ-A47024-000001	Coil For SHF, SQ-A47, AC 24V IP54	Spade (Faston)³	-	AC	6	5	-	39	
10805240702	SQ-A2522G-000870	Coil For SHF, SQ-A25, AC 220-240V	Lead Wires	1500	AC	4,5	3,5	-	39	
10805029102	SQ-A2522G-000001	Coil For SHF, SQ-A25, AC 220-240V	Lead Wires	500	AC	4,5	3,5	-	39	
10805227602	SQ-A25024-000001	Coil For SHF, SQ-A25, AC 24V IP54	Lead Wires	500	AC	4,5	3,5	-	39	



Order No	Model	Description	Cable Length [mm]	Pack [qty]	Wire Harness Tel Demeti SQ
20805136301	SQ-000000-090028	Accessory For 4-Way Valve SHF Coil SQ Wire Harness	1200	120	

